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ABSTRACT

The Children's Language Assessment-Situational Tasks (CLA-ST) was developed to collect language samples within a normally operating classroom. The language is taken on a cassette tape recorder, which is placed at the foot of a small table. At this table, in a committee setting, four children are engaged with a teacher in an activity similar to those they encounter daily. The CLA-ST is broken into three segments: the first, with their own classroom teacher, utilizes a "mystery bag" containing 27 common household objects (15 minutes); the second, with a new adult (a staff research assistant), uses a set of eight picture cards that have no set solution (15 minutes); in the third, the children are left alone (five minutes), with the tape recorder running, while the adult excuses herself briefly. These three segments are intended to get different perspectives on children's language development. The first should resemble very closely children's typical use of language in the classroom. The second segment assesses whether their language style is modified in the presence of an unfamiliar adult. The third segment seeks to simulate other studies of natural language, and the children are left alone with the cards and the tape recorder running. The tapes are returned to the Arizona Center for transcription and analysis. The information is broken down into free flow format which identifies teacher and child output. These are then submitted to an analysis for basic language dimensions. (Author/DEP)

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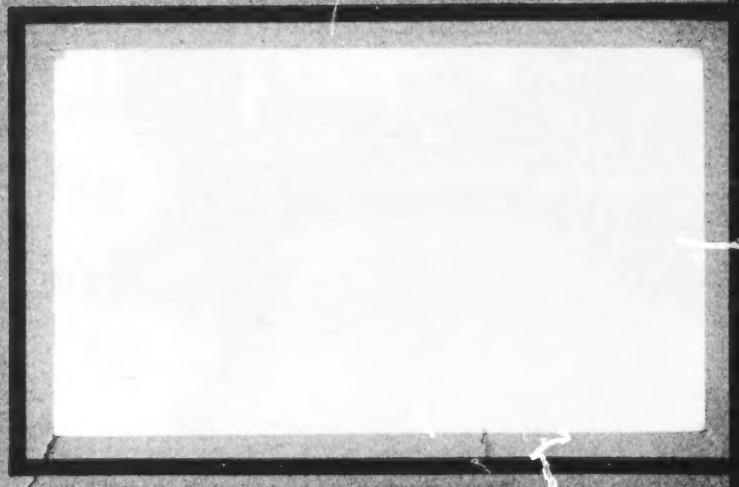

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CHILDREN'S LANGUAGE ASSESSMENT -- SITUATIONAL TASKS

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April 20, 1976

This summary was prepared to accompany a presentation at Session 5.07 of the 1976 Annual Conference of the American Educational Research Association.

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SUMMARY

The CLA-ST was developed to collect language samples within a normally operating classroom. The language is taken on a cassette tape recorder, which is placed at the foot of a small table. At this table, in a committee setting, four children are engaged with a teacher in an activity similar to those they encounter daily. The CLA-ST is broken into three segments: the first, with their own classroom teacher, utilizes a "mystery bag" containing 27 common household objects (15 minutes); the second, with a new adult (a staff research assistant), uses a set of eight picture cards that have no set solution (15 minutes); in the third, the children are left alone (five minutes), with the tape recorder running, while the adult excuses herself briefly.

These three segments are intended to get different perspectives on children's language development. The first, with a familiar teacher, should resemble very closely children's typical use of language in the classroom. The second segment assesses whether their language style is modified in the presence of an unfamiliar adult. During Task II (new adult), the adult uses only a limited set of prompts to reduce spurious influences on the children's language. The third segment seeks to simulate other studies of natural language, and the children are left alone with the cards from Task II and the tape recorder running.

The tapes are returned to the Arizona Center for transcription and analysis. The information is first broken down into free flow format which identifies teacher and child output. These are then submitted to an analysis for basic language dimensions.

Description of Procedure

CLA-ST: Session 1

This session is designed to assess ongoing classroom teacher-child and child-child interactions. Data are gathered within the instructional setting with a group of three children working with their own classroom teacher. Teacher input is unstructured, but the length of the session is controlled.

A tape recorder and microphone are set up in the classroom and the classroom teacher is provided with a bag of common objects (Appendix A). The following instructions are given to the teacher:

> In this bag is an assortment of common objects. We would like you to use these materials with three of your pupils that we will select. You are free to use the materials in any way you like to elicit language from your children. We would like you to conduct your teaching session around this table. We will tape record your session. We will alert you when the 15 minutes are up. Do you have any questions?

CLA-ST: Session 2

This session is designed to gather language in a structured situation somewhat analogous to a typical testing situation. Three randomly selected classmates are brought to a quiet room separate from their classroom. The stimulus materials are eight laminated, colored cartoon cards depicting a humorous fight between two men. Possible sequencing of the eight cards is highly varied and intentionally ambiguous. (See Appendix B) The "teacher" is a research assistant and unknown to the children. She asks the group of children structured questions about randomly selected, specified cards. In the first five-minute phase the "teacher" presents cards singly and, allowing time for responses, asks two questions: "What is happening in this picture?", and "Is there anything you want to ask about this?". Presenting two cards at a time in the second phase, two questions are asked: "Which picture comes first? Why?", and "What happened after

this card?". In the final five-minute phase the "teacher" presents three cards at a time and asks: "What story do these pictures tell?", and "How could you change these cards to tell a new story?". Like Session 1, the total time of this session is fifteen minutes.

CLA-ST: Session 3

This session is included in data collection as a sample of children's free, spontaneous speech. At the completion of Session 2, the "teacher" advises the group: "I have some work to do, but you can continue to play with the cards while I do it." Depending on the school's regulations, she then leaves the room or removes herself to another part of the room and turns her attention away from the children. The group of three children are left with the stimulus cards and with the tape recorder operating for five minutes. The adult does not interfere, with the exception of potential damage to the children or equipment.

Data Analysis

Tape recordings of the language samples are transcribed and coded by a team of five research assistants. A consensus method of reliability is used by the research staff for the transcription of the tape recordings. After transcription, a tape recording is listened to a second time by another research assistant, and points of contention are resolved by consensus. Twenty percent of each staff's coding is recoded by another assistant. The resulting reliability for all language variables was 94%, with a range of 89% to 100%.

The coding yielded data on eleven language analysis variables. These variables are described in Table 1.

INSERT TABLE 1

TABLE 1

Language Analysis Variables
for the CLAST

Category	Variable	Explanation
Language Output	Average number words per child	Total number of child words per session divided by the number of children in the group (3).
Linguistic Diversity	Type-token ratio	Number of different words (types) divided by the total number of words (tokens); yields a measure of vocabulary size.
	Present verbs/Total Verbs	Number of present tense verbs divided by the total number of verbs; provides a measure of diversity of verb tense usage.
	Words not on Dolch Vocabulary List	Frequency of words used by children that are not on the Dolch Vocabulary List; another method of measuring vocabulary size.
Syntactic Performance	Number of complete T-units	Frequency of complete T-units, or the simplest part of a sentence that can stand alone, together with any subordinate clauses that may be grammatically related; considering the unique demands of conversation, a T-unit can be grammatically incomplete, a simple sentence, or a complex sentence.

TABLE 1 (cont.)

Category	Variable	Explanation
Syntactic Performance	Percentage of complex T-units	The number of complex T-units divided by the number of complete T-units.
	Child-initiated questions	Frequency of questions from a child directed to peer or adult.
Miscellaneous	Assignments of words to cartoon characters	In the second session only: the frequency of direct or indirect quotes where a child provides words for a cartoon character.
	Task-specific/total utterances	In the peer only session: number of child responses concerning playing with the cards (their task as stated by the adult) divided by the total responses in the session.

The only language analysis variable indicating quantitative differences in language output is the *average number of words per child.* Sometimes used as a measure of linguistic development, the number of words per unit of time is sensitive to situation demands. Although the total length of the sessions was controlled (e.g., fifteen minutes each in Sessions 1 and 2; five minutes in Session 3), the average number of words per child in Session 1 reflects either the relative amount of talking by teacher or by children, or the ease of talking freely in group situations, or both. In Session 2, the amount and content of adult input was controlled, but the children were in a new situation with an unknown adult. Cross-session comparisons on this variable can be made only with consideration of these situational demands.

Three variables provide data on linguistic diversity in oral speech: type-token ratio, verb tense diversity, and vocabulary diversity. A *type-token ratio* is the ratio of the number of different words (types) to the total number of words (tokens). High type-token ratios indicate more linguistically diverse speech than do lower ratios. The use of a few words frequently as opposed to a larger variety of words would yield a low type-token ratio. One problem with type-token ratios is that the ratio will decrease as the sample size increases because fewer and fewer of the words will not have occurred in the samples already counted. To make the ratios independent of sample size, the number of different words (types) were divided by the square root of twice the number of words in the sample (Carroll, 1964, p. 54). A measure of *verb tense diversity* is provided by the ratio of present tense verbs to total verbs. The lower a verb diversity ratio is, the more a child used past and future tense verbs. A second measure of vocabulary diversity in addition to the type-token ratio is the *frequency of words used that do not appear on the*

Dolch Vocabulary List. Words on this list are those commonly found in primary grade reading primers. A frequency count of words in a child's lexicon other than those on this list can be interpreted to assess richness of vocabulary.

Syntactic performance in the language samples was assessed by four variables: number of complete T-units, average length of T-units, percentage of complex T-units, and frequency of child-initiated questions. A *T-unit* is defined as the simplest part of a sentence that can stand alone, together with any subordinate clauses that may be grammatically related. Considering the unique linguistic demands of conversation, a T-unit can be grammatically incomplete, a simple sentence, or a complex sentence. The frequency of *child-initiated questions* is a program-specific goal and reflects interest in children's acquisition of generative skills.

Task II data was also analyzed for the frequency of assignments of words to cartoon characters. This was included as a measure of ease of narration and/or as a qualitative narrative skill. During the session in which peers are without a controlling adult, a measure of task-oriented conversation was generated by a ratio of the number of task-specific utterances over the number of total utterances.

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Plexiglass	Purple "pop" bead
Chain	Shell
Brush	Sandpaper
Rubberband	Green thread
Velvet ribbon	Portion of egg carton
Eraser	Battery
Sponge	Ruler
Candle	Mitten
Wire	Marshmallow
Bottle cap	Pencil
Green washer	Black plastic ring
Paper clip	Nail
Button	3 pipe cleaners (orange, white, yellow)
Piece of metal	Orange balloon
Red "pop" bead	2" brad

APPENDIX A. Contents of Session I "Mystery Bag".

APPENDIX B

Stimulus Cards Used in Session 2